#### § 153.240

means those cargoes that Table 1 references to §153.525 or §153.527.

[CGD 78-128, 47 FR 21207, May 17, 1982]

### §153.240 Insulation.

Cargo containment system insulation made necessary by the requirements of this part must meet the requirements in §38.05–20 of this chapter. However, the vapor barrier required by §38.05–20(b) is unnecessary if the insulation is:

- (a) Protected from the weather, and attached to a containment system maintained at a temperature in excess of 46°C (approx. 115°F); or
- (b) In an atmosphere whose dewpoint is less than the temperature of any surface in contact with the insulation.

### CARGO TANKS

# §153.250 Double-bottom and deep tanks as cargo tanks.

Except in those cases in which Commandant (G-MSO) specifically approves another arrangement, such as a double-bottom or deep tank as a cargo tank, an integral cargo tank or the hold within which an independent cargo tank is located must extend to the weatherdeck.

[CGD 73-96, 42 FR 49027, Sept. 26, 1977, as amended by CGD 82-063b, 48 FR 4781, Feb. 3, 1983]

#### §153.251 Independent cargo tanks.

All independent cargo tank must meet \$38.05-10 (a)(1), (b), (d), and (e)(1) of this chapter.

[CGD 78-128, 47 FR 21208, May 17, 1982]

## §153.252 Special requirement for an independent cargo tank.

When Table 1 refers to this section, the cargo tank must be an independent tank that meets §§ 38.05–2(d) and 38.05–4(g) of this chapter. (See also § 153.256(b)).

[CGD 78-128, 47 FR 21208, May 17, 1982]

### §153.254 Cargo tank access.

- (a) A cargo tank must have at least one covered manhole opening into the vapor space described in §153.354.
- (b) An access through a vertical cargo tank surface must be at least 60 cm by 80 cm (approx.  $23.6 \times 31.5$  in.) and no more than 60 cm above a foothold

grating, or surface on both sides of the access way.

- (c) An access through a horizontal cargo tank surface must be at least 60 cm by 60 cm (approx.  $23.6 \times 23.6$  in.).
- (d) An access trunk must be no less than 76 cm (approx. 29.9 in.) in diameter

## §153.256 Trunks, domes, and openings of cargo tanks.

- (a) The hatch of a cargo tank must:
- (1) Be at the highest point of the tank; and
- (2) Open on or above the weatherdeck.
- (b) To be endorsed to carry a cargo requiring an independent cargo tank, a tank must have:
- (1) A trunk or dome at the uppermost part of the tank, extending above the weatherdeck;
- (2) Its hatch at the top of the trunk or dome; and
- (3) No openings below the weatherdeck.

### §153.266 Tank linings.

A tank lining must be:

- (a) At least as elastic as the tank material; and
- (b) Applied or attached to the tank as recommended by the lining manufacturer.

PIPING SYSTEMS AND CARGO HANDLING EQUIPMENT

### §153.280 Piping system design.

- (a) Each cargo piping system must meet the standards of Part 56 and §§ 38.10-1(b), 38.10-1(e), and 38.10-10(a) of this chapter.
- (b) Piping carrying cargo or cargo residue may not enter any machinery space except a cargo pumproom.

## §153.281 Piping to independent tanks.

Piping for an independent cargo tank must penetrate the tank only through that part of the tank or dome extending above the weatherdeck.

[CGD 78-128, 47 FR 21208, May 17, 1982]

### §153.282 Cargo filling lines.

The discharge point of a cargo tank filling line must be no higher above the bottom of the cargo tank or sump than